Provider Versus Patient-centered Approaches to Health Promotion With Parents of Young Children: What Works/Does Not Work and Why

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Abstract

The purpose of this paper was to provide insight into why the health promotion approach now in general use does not work and to describe the rationale and specific steps that can be taken to enhance the effectiveness of preventive communications. (Pediatr Dent 2006;28:172-176)

KEYWORDS: PREVENTIVE DENTISTRY, COUNSELING, MOTIVATIONAL INTERVIEWING

The epidemic of caries

Much has been written about the epidemic of caries in the mouths of the young children of the disadvantaged. Once infected with caries, these young children have a high likelihood of subsequent caries, in both the primary and permanent dentitions.[1] Access to dental services is a problem, as public health programs have been overrun with early childhood caries and caries-related emergencies. In addition, the private practice community has not been able to pick up the slack.

The standard of care

The epidemic of caries cannot be solved by providing treatment. There will never be sufficient resources to provide access to treatment for all of the children with the disease. Moreover, traditional restorative dental treatments do not stop the caries process.[2,3] The dental profession is left with caries prevention as its only hope for the oral health of its most disadvantaged children. The gold standard for prevention of caries is traditional health education. This approach appears to be insufficient to change the behaviors of parents of high-risk children. While some parents of children at risk for caries are unaware of the etiology of this disease,[4-6] research does not support the efficacy of providing information to these parents.[7-9]

A new approach

While health education has been found lacking, a new approach—brief counseling—has shown promising results. In a pilot study, Harrison and Wong[10] reported that children whose mothers had at least 2 counseling appointments and follow-up telephone calls provided by a lay health counselors had fewer caries than children at baseline. Weinstein et al[11] compared traditional health education to a brief motivational interviewing (counseling) intervention. Two hundred forty high-risk, 6- to 18-month-old infants and their parents were enrolled. Parents in both groups received a pamphlet and watched a video. In addition, parents in the counseling group also received 1 counseling session and 6 follow-up telephone calls from lay health counselors. Results after 1 and 2 years clearly showed the benefits of brief counseling. After 1 year, children in the counseling group had .71 new carious lesions, while those in the control group had 1.91 new lesions. Even though there was no intervention in year 2, the year 2 data presented similar results.

These studies are presented not as definitive evidence that brief counseling of one form or another should be implemented to control caries, but as an example of the possibilities that may be realized when one's frame of reference is altered. Traditional health education takes a provider-centered approach. It relies on 1-way communication from the experts to those who are presumed to benefit from the expertise. The expectation is that a brochure, video, public service announcement, lecture, and other traditional approaches, will alter the behavior of those at risk or those charged with protecting the health and welfare of those who are at risk. This expectation is faulty.

Counseling takes an alternative approach. It relies on 2-way communication and the understanding of the patient or parent. When the counselor does all the talking, counseling usually fails.[13] In fact, the percentage of time the patient or client talks is often an outcome measure of success in studies of counseling.[14]

Patient-centered studies

In the last 10 or so years, dental researchers have begun to learn about the target of their efforts: the parents and their children who are at high risk for caries. In the past, the focus was on caries epidemiology. No attempts were made to understand the beliefs and behaviors of these parents.

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Such an understanding is vital to the crafting of effective interventions. Examples of studies that contribute to a better understanding of these parents are cited as follows.

Weinstein et al[15] trained 5 Crow women to conduct interviews with parents and caregivers. Sixty-two interviews in the Crow language were translated, transcribed, and coded. Results suggested that many parents reported having problems with their own teeth and that dental treatment they received was aversive. As children aged, they became more fearful of dental treatment. Parents reported that they did not routinely comply with professional recommendations, such as prescriptions of sleeping with a bottle. When the sample was broken into inexperienced (pregnant or having 1 child less than 3 years old) or experienced (at least 1 child older than 3) parents, the comments of the inexperienced mothers indicated more willingness to follow professional recommendations.

The aforementioned study begins to provide insights about the target population. The experiences of parents—low dental health and the utilization of primarily emergent dental services—paints a picture of the beliefs and behaviors that must be impacted. Moreover, the parents have said they are unwilling to follow recommendations that do not fit their beliefs and lifestyles. To optimize success in this population, it is reasonable to focus on inexperienced mothers. Other studies have found intergenerational effects. For example, Skaret et al,[16] in a case control study of adolescents with visible dental caries, found the reported dental health of the mother and parental avoidance of dental treatment to be associated with adolescent dental avoidance. In many cases, the adolescent was only a few years away from parenthood.

Even a cursory review of the medical literature reveals that disadvantaged children, primarily ethnic populations, have very high rates of uncontrolled chronic diseases and tend to suffer severe consequences. Diabetes, obesity, and asthma are just a few examples that come to mind. It seems that low-income parents and other adults have an acute model of disease that guides their beliefs and behaviors.

Disadvantaged populations view caries as an acute disorder, avoiding care until the caries process results in discomfort and pain. Treatment of such teeth in outpatient settings usually is painful and reinforces avoidance.[17] Finding a way to alter their perceptions of caries as an acute problem is needed. Discussion of these emergent dental experiences can lead to change.

Continuity of care

Literature in medicine suggests that recommendations to engage in preventive practices works in settings where there is continuity of care. It is insufficient to simply have a medical home. Having the same provider over time is associated with the patient engaging in preventive behaviors.[18,19] Continuity is also probably an issue in the prevention of dental disease. Recommendations from dentists in emergent settings where there is little continuity are not likely to be followed. At present, there is precious little information to guide the development of interventions in emergent settings for both adults and children. For example, what do dentists need to say or do so parents will bring their children in for follow-up care and engage in preventive parenting practices?

What parents have learned

In addition to promoting oral health in a provider-centered manner, inattention to continuity of care, and the beliefs that guide the behaviors of the parents of high-risk children, there has been some inadvertent teaching that has caused problems.

1. By their inattention to young children, many dentists have taught parents that primary teeth are not important. It is only recently that recommendations of when parents should take their children to a dentist have been moved forward to early childhood. Similarly, it is only now that some dental schools are training their undergraduates to examine and provide care to infants and toddlers. Unfortunately, there are still dentists who focus all their attention on the permanent dentition and believe that primary teeth lack importance. Forty-five percent of general practitioners surveyed in a random sample of Washington State American Dental Association members felt that is was definitely or probably not important to care for infants and toddlers; 59% reported that it was definitely or probably not important to prioritize funding for these children.[20] On the other hand, in a more recent study of dentists in a Washington State local dental society that was involved in a program for infants and preschoolers, both participant and nonparticipant dentists rated the care of infants and preschoolers much higher.[21] The public's knowledge lags behind, with the disadvantaged most disconnected to new information and approaches.
2. Many dentists teach parents that a hole in the tooth is the problem. Parents believe that their job is to bring their children to the dentist, who will repair the damage, thus ending the problem. Though the author has never read a paper assessing dentists' beliefs and knowledge on this topic, it seems like many dentists behave as if this is true. The reality, of course, is that this is not so. Caries is a process and loss of tooth structure is a late stage in the process.[22] The restorative treatment of caries itself does not have a meaningful impact on the caries process.[2,3] Other steps must be taken that include parental and/or professional activities. Some parents have learned that dental services do not work for them. Repeated treatments provided by competent professionals do not seem to have the desired effect. Therefore, parents and their children believe they must have "soft teeth" for which there is little hope.

A simple solution to the aforementioned problems is to focus on a patient-centered approach called motivational inteviewing (MI). MI and its offshoot counseling strategies that are used in health settings are a brief form of counseling. The initial counseling needs a minimum of 3 to 15 minutes and, depending on the problem and the individual,

can benefit from more time. Short follow-up discussions in person or on the phone are part of the counseling. The steps involved in this brief patient-centered approach are specified as follows. A workbook teaching this approach is also available.[23]

Step-by-step motivational interviewing

Step 1: Establish rapport and trust

Establishing a therapeutic alliance between the health care professional and the patient or parent is necessary for change. In recent years, the importance of this bond has been repeatedly demonstrated in all the helping professions, as advice from a stranger usually falls on deaf ears.

Step 2: Ask questions and help the patient make an argument for change

It is useful to let parents talk and hear themselves voice the need to change. This helps parents identify the problem that will motivate them to change. Dentists are helpers; the parents are responsible for the decision to act or change. They will consider acting or changing when they perceive they have a problem.

Dentists should help parents identify the problem by asking meaningful questions (and by listening to what they say). Technically, according to the MI literature, dentists are helping to create a discrepancy between present behavior and important personal goals. Parents' statements that reveal these goals that they were not aware of, or perhaps even denied to others, are called self-motivational statements. MI counseling attempts to have parents make such statements repeatedly.

The following is an example of meaningful questions to a parent: "Tell me about your teeth and the teeth of your older child (who has stainless steel crowns)…What do you want for your baby?"

Step 3: Encouraging self-motivational statements

After asking questions, listen for self-motivational statements and paraphrase. An example of this kind of dialogue is: Parent: "I don't want my child to whave miserable teeth like mine. I want her to have a nice smile." Dental professional: "You don't want Donna to suffer; you want her to have a pretty smile. How much would you like for this to happen?"

The more parents talk about their problem, their intent to act or change, and their optimism, the better. Hearing themselves acknowledge a problem and voice determination to solve it facilitates action.

Step 4: Helping prepare for change

When parents make self-motivational statements ("I want my kid to…") they are contemplating action and the problems or difficulties associated with it. While it is useful to continue to encourage self-motivational statements, the MI counselor should now identify the "cons," the obstacles or hurdles that interfere with action. The counselor should encourage a plan that will minimize or overcome these interferences.

When it is believed that a parent is very aware of the problem and desires to change or act, the MI counselor should begin to provide additional direction. The counselor should ask permission to problem solve with the patient or parent.

"You have given me reasons why you want to…May I share some ideas with you that worked for other patients?"

Once permission is provided, the counselor should give the parent choices. If you work in a setting in which the same problem reappears very often, you may want to provide the parent with a written "menu" of options that others have successfully used.

After presenting the menu to the parent, briefly review each item. Discuss the items that the parent is interested in a second time, more thoroughly. Ask the parent to brainstorm other ideas not on the menu, but caution the parent not choose to implement all of the items. Additionally, focus on a subset that is feasible and discuss the problems the parent may have in implementing them.

The goal of this step in the MI process is to develop a plan for change. The plans that work best are those put in writing.

Step 5: Responding to resistance

Resistance is normal; it should be expected. Resistance should be viewed as the flipside of motivation. Minimize resistance, maximize motivation; allow resistance to blossom, and motivation dissipates.

There are various forms of resistance, both active and passive. The following are typical: arguing, interrupting, denying, minimizing the problem, being pessimistic or fatalistic, and ignoring or sidetracking the discussion.

What should you do when you are aware that the parent is demonstrating resistance? Follow these guidelines:

1. Think of resistance as a signal, a red light to stop and do something different. This is the most important guideline. Most of the time, parents show resistance when you are moving too fast and/or do not understand the parent and his/her situation. The parent may not be in the stage you anticipated. He or she may be ambivalent.
2. Avoid arguing or debating. Defending your point of view only leads to more defensiveness. The force of your argument will not alter resistance, only perhaps its form. Parents who argue and hear themselves telling you why they cannot act or change will not act or change.
3. Drop the expert role. Avoid being authoritative. You have probably been talking too much. Ask an open-ended question and use reflective listening.
4. Emphasize choice and encourage an active patient role. Tell the patient, "I'm not here to make decisions for you; it's truly your choice." Encourage self-motivational comments. "Tell me again what you want to

happen." "What happens if you do nothing?" Encourage discussion and problem solving.

5. Involve family members when possible. Identify family (or friends) who may be concerned about the problem. Is that person supportive? If so, ask the parent to include that person in creating and implementing a plan.
6. Agree with the patient; side with the negative. While not the first strategy you should use, it can be effective. Agree with the parent in a way that demonstrates empathy, not disdain. Acknowledge the difficulties and the truth as the parent sees it. Interestingly, when you agree, the parent often argues for the action or change.
7. Respond to provoking comments. Patients often have beliefs that keep them from acting or changing. These beliefs often reflect folk mores, family history, or the conventional wisdom that is out of date. What you say when a parent makes one of these comments may determine the outcome of dental counseling. For example: Dental professional: "We are interested in protecting your child's teeth so he will not have dental infections like you have." Parent: "But they are only baby teeth." Dental professional: "I know. Dentists used to think baby teeth were not important, but we have learned a few things recently. If there is an infection in the baby teeth, there will be an infection in the permanent teeth for the rest of the person's life. Early loss of baby teeth also can result in crooked teeth."

Try agreeing with the parent *and* communicating new information—in this instance, the importance of baby teeth.

Step 6: Follow-up and relapse

Before you say goodbye to the patient, be sure the parent understands that you will be available for follow-up. Anticipate problems. Tell the parent that it is your expectation that there will be bumps in the road. You can discuss possible problems and solutions. For example, what do you say to a grandmother who wants to put sugar into the baby's bottle? Moreover, the plans that were made may need to be adjusted. Tell the parent to feel free to contact you to solve problems.

Towards that end, schedule brief follow-up telephone contacts or actual visits. Try to arrange to call a parent within a given time window ("what is the best time to call you?"). Call or visit after 2 weeks, then a month. Frequent follow-up is very helpful and is not time consuming. Postcard reminders can also be used.

Future work: Teaching and research?

New developments such as motivational interviewing are exciting and have promise. While there are some dental schools in North America that do not meet accredition guidelines in teaching basic communications skills,[24] some dental schools are beginning to teach motivational interviwing-like counseling skills.[25]

More research that captures the perspective of the parent is needed to help structure interventions. Clearly, additional clinical studies of patient-centered approaches that assess advantages, limitations, and cost-effectiveness are warrented.

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Abstract of the Scientific Literature

Adhesive Dentistry and Endodontics

The purpose of this review was to discuss current methods of "bonding" to tooth structure and material incompatibilities, with emphasis on those aspects important to endodontics. In addition, different clinical strategies for restoring access cavities after completion of endodontic treatment have been discussed. Most strategies for restoring access cavities require several steps and at least 2 layers of restorative material. Many approaches utilize an adhesive system and 2 restorative materials. The exception is unbonded amalgam alloy. To prevent contamination of the root canal system, restore access cavities immediately whenever possible and use bonded materials. The fourth-generation (3-step) resin adhesive systems are preferred because they provide a better bond than adhesives requiring fewer steps. The "etch and rinse" adhesives are preferred to "self-etching" adhesive systems if a eugenol-containing sealer or temporary material is used. "Self-etching" adhesives should not be used with self-cure or dual-cure restorative composites. The best esthetics and highest initial strength is obtained with an incremental fill technique with composite resin. A more efficient technique which provides acceptable esthetics is to bulk fill with a glass ionomer material to within 2 to 3 mm of the cavo-surface margin, followed by 2 increments of light-cure composite.

Comments: The complexity of restorative dentistry has increased greatly in recent years, with the myriad of products used in "adhesive dentistry." This is an excellent review which discusses specific materials, procedures, and major decision-making elements important to endodontics. In addition, it discusses how to avoid problems in compatibility between endodontic and restorative materials. **FSS**

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Schwartz RS, Fransman R. Adhesive dentistry and endodontics: materials, clinical strategies and procedures for restoration of access cavities: a review. J Endod 2005;31:151-165.

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